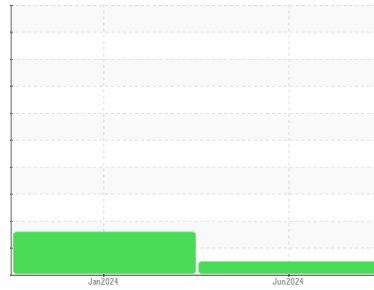




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER SX 5 4553959 (S/N 1133)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA019335	KCPA008899	---
Sample Date	Client Info		18 Jun 2024	11 Jan 2024	---
Machine Age	hrs	Client Info	15880	15407	---
Oil Age	hrs	Client Info	473	0	---
Oil Changed	Client Info		Not Chngd	N/A	---
Sample Status			NORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	<1	---
Chromium	ppm	ASTM D5185m >10	0	0	---
Nickel	ppm	ASTM D5185m >3	0	0	---
Titanium	ppm	ASTM D5185m >3	0	0	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >10	0	1	---
Lead	ppm	ASTM D5185m >10	0	0	---
Copper	ppm	ASTM D5185m >50	1	3	---
Tin	ppm	ASTM D5185m >10	0	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m 90	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	<1	0	---
Magnesium	ppm	ASTM D5185m 90	61	24	---
Calcium	ppm	ASTM D5185m 2	0	<1	---
Phosphorus	ppm	ASTM D5185m	1	14	---
Zinc	ppm	ASTM D5185m	20	33	---
Sulfur	ppm	ASTM D5185m	22490	20200	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1	---
Sodium	ppm	ASTM D5185m	13	11	---
Potassium	ppm	ASTM D5185m >20	3	2	---
Water	%	ASTM D6304 >0.05	0.040	▲ 0.127	---
ppm Water	ppm	ASTM D6304 >500	408	▲ 1270	---

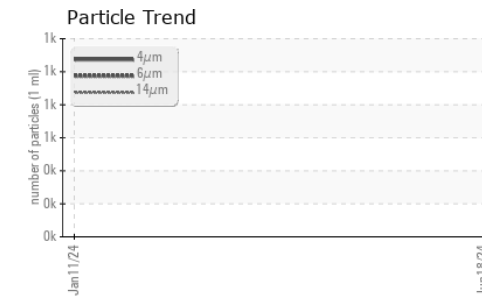
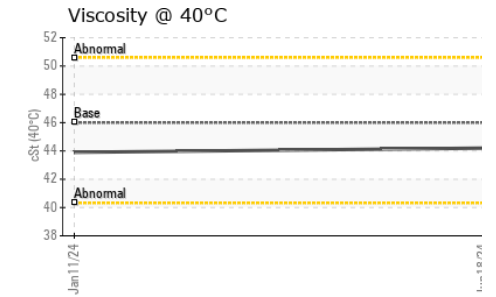
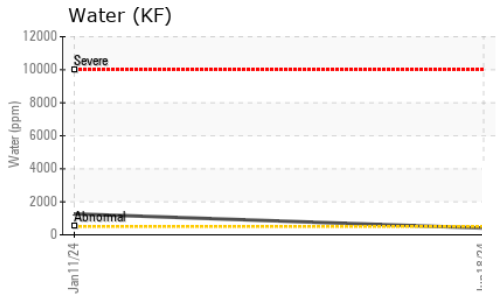
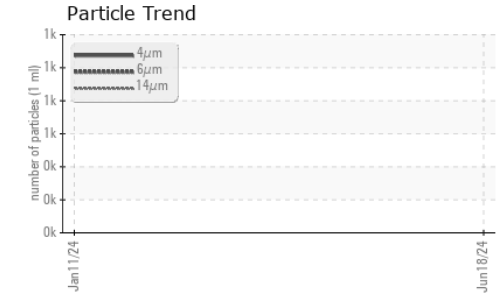
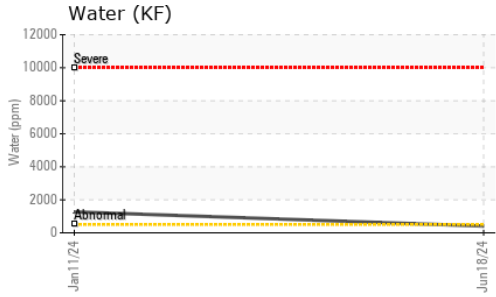
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		1122	---	---
Particles >6µm	ASTM D7647 >1300		358	---	---
Particles >14µm	ASTM D7647 >80		17	---	---
Particles >21µm	ASTM D7647 >20		3	---	---
Particles >38µm	ASTM D7647 >4		1	---	---
Particles >71µm	ASTM D7647 >3		0	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	17/16/11	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.40	0.24	---

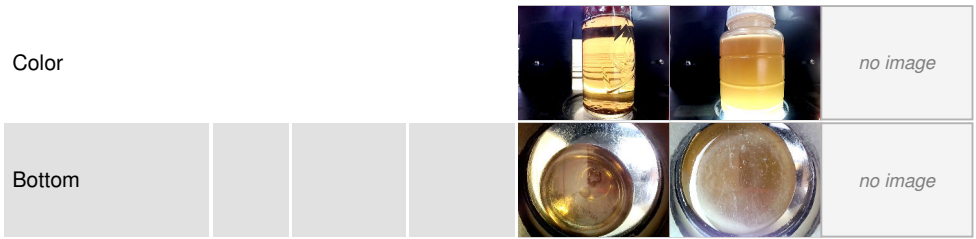
OIL ANALYSIS REPORT



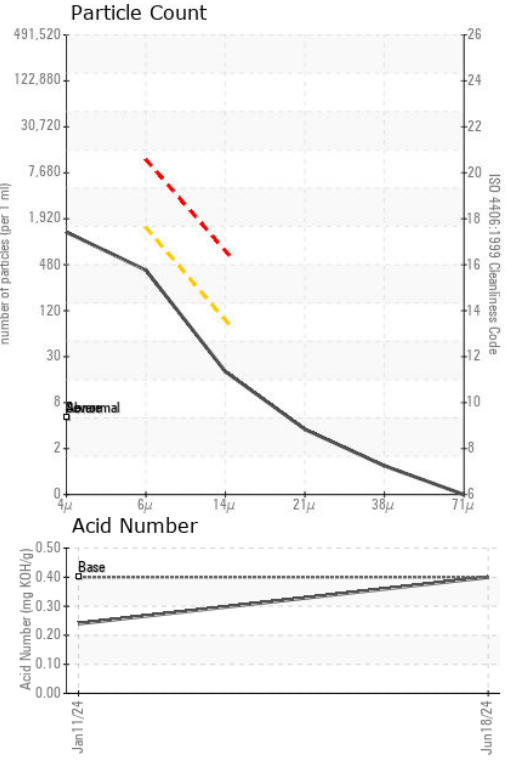
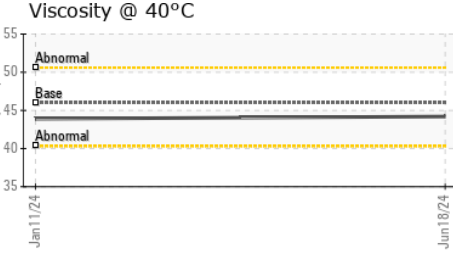
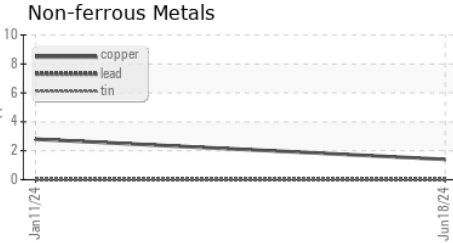
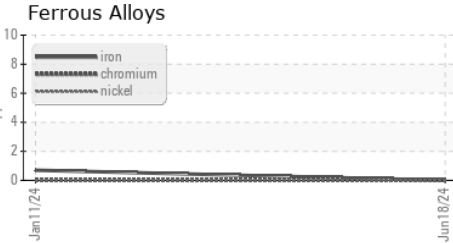
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.2	43.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS





ANAB
ACCREDITED
TESTING LABORATORY

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA019335
Lab Number : **06221206**
Unique Number : 11099403
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Don Baldrige

OLD DOMINION FREIGHTLINERS
 3608 ROOY MESSER HWY
 WHITE PINO, TN
 US 37890
 Contact: KEVIN SCHULL
 kevin.schull@odfl.com

T:
F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)